

### ABSTRACT OF THE DISCLOSURE

A sample loading device for loading and injecting a sample of a specimen is provided. The device comprises an injection channel having a sample injection spot, the injection channel adapted for feeding a fluid  
5 comprising a specimen. It further comprises an injector for injecting the specimen into the fluid along the injection channel and a separation device adapted for separating a sample from the specimen at the sample injection spot. Furthermore it comprises a control unit adapted for  
10 controlling the separation device in response to a detected physical parameter of the fluid.